

AMENDMENTS TO THE CLAIMS

1. (Cancelled)
2. (Previously Presented) The process of claim 23, wherein the distilling step uses a single or multi-pass distillation operation.
3. (Cancelled)
4. (Previously Presented) The process of claim 23, wherein the distillation apparatus is a low residence time distillation apparatus.
5. (Previously Presented) The process of claim 23, wherein the distillation apparatus is operated at a reduced pressure of greater than about 0 and lower than about 760 mmHg.
6. (Previously Presented) The process of claim 23, further comprising the step of at least partially removing side products generated during formation of the first ester stream.
- 7 (Cancelled)
8. (Currently Amended) A process to produce a refined conjugated linoleic acid-containing material, comprising:

transesterification of a linoleic acid-containing oil to generate a composition containing linoleic acid esters;

isomerization of the composition containing linoleic acid esters to form a first stream containing c9,t11 and t10,c12 isomers of conjugated linoleic acid esters; and

distillation of the first stream in a distillation apparatus containing a thin film or wiped-film evaporator connected to a ~~fractionating-rectification~~ column, the ~~fractionating-rectification~~ column including a heater operated at a temperature in the range of 240° C to 270° C, to produce a second stream, wherein the second stream resulting from the

distillation is enriched in the c9,t11 and t10,c12 isomers of conjugated linoleic acid esters compared to the first stream.

9. (Cancelled)

10. (Original) The process of claim 8, wherein the step of isomerization is catalyzed by a catalyst base in a nonaqueous system.

11. (Original) The process of claim 10, wherein the catalyst base is an alkali or alkaline earth alkoxide salt of a C₁-C₄ alkyl group alcohol.

12. (Original) The process of claim 11, wherein the cation of the alkoxide salt is a sodium, a potassium or a calcium cation.

13. (Original) The process of claim 10, wherein the catalyst base is a solid or a solution in a conjugate alcohol of the alkoxide.

14. (Original) The process of claim 8, wherein the step of isomerization is performed between about 90-140° C.

15. (Original) The process of claim 8, wherein the step of isomerization is performed between about 110-120° C.

16. (Original) The process of claim 8, wherein the linoleic acid-containing oil is selected from the group consisting of safflower oil, corn oil, sunflower oil, soybean oil, grape seed oil, cottonseed oil, sesame oil, derivatives thereof, and combinations thereof.

17. (Original) The process of claim 8, wherein the transesterification and isomerization steps are performed in one reaction vessel concurrently or sequentially without an intervening distillation step.

18. (Original) The process of claim 8, wherein the transesterification and isomerization steps occur concurrently in a continuous reaction system using a dual reaction zone apparatus.

19. (Original) The process of claim 18, further comprising the step of at least partially removing side products from the transesterification step.

20. (Original) The process of claim 18, wherein the transesterification step is completed in a first reaction zone and the isomerization step is completed in a second reaction zone.

21-22. (Cancelled)

23. (Currently Amended) A process to refine a conjugated linoleic acid-containing material comprising:

introducing a first ester stream comprising c9,t11 and t10,c12 isomers of conjugated linoleic acid esters and unconjugated linoleic acid components into a distillation apparatus, wherein the distillation apparatus is a thin film or wiped-film evaporator connected to a ~~fractionation~~rectification column, the ~~fractionation~~rectification column including a heater operated at a temperature in the range of 240° C to 270° C;

distilling the first ester stream in the distillation apparatus to produce a second ester stream, wherein the second ester stream is enriched in the c9,t11 and t10,c12 isomers of the conjugated linoleic acid esters and reduced in the unconjugated linoleic acid components compared to the first stream.